

**SEMICONDUCTOR DEVICE WITH MAGNETICALLY PERMEABLE
HEAT SINK**

Abstract of the Disclosure

5 A semiconductor device is attached to a heat sink by glue that is both thermally conductive and magnetically permeable. The glue fills different features in the surface of the semiconductor device so that there is good coupling between the semiconductor device and the heat sink. The glue is filled with magnetic particles so that the glue is magnetically permeable. The
10 semiconductor device is formed with the heat sink at the wafer level and then singulated after attachment of the heat sink with the glue.